



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/575,680

04/13/2006

Yasuhiro Watanabe

0707590043

4618

20277 7590 12/16/2009
MCDERMOTT WILL & EMERY LLP
600 13TH STREET, N.W.
WASHINGTON, DC 20005-3096

EXAMINER

ZHANG, YUANDA

ART UNIT

PAPER NUMBER

2828

MAIL DATE

DELIVERY MODE

12/16/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 12/03/09 have been fully considered but they are not persuasive.
2. Regarding claim 1, the Applicant has argued that Tanabe fails disclose, suggest, or otherwise render obvious the recited "two-beam semiconductor laser device ... wherein a lateral width of the sub-mount along the front part of the sub-mount is 400 micron or more but 700 micron or less" in claim 1 because the two copies of Tanabe's single LD chip 30 corresponding to Abe's LD1 and LD2 would have increased the width of the sub-mount. The Examiner respectfully disagrees. The Examiner notes that the combination is simply made to demonstrate that it would have been obvious to modify the LD chip 30 of Tanabe with the laser diode of Abe comprising first and second semiconductor laser elements. It does not mean to simply duplicate the LD chip 30 of the same dimension based on the teaching of Abe. Since the Applicant has not provided any evidence that the sub-mount of Abe has a lateral width less than or greater than the specified width in claim 1, the limitations of claim 1 are fully taught by the combination.
3. Regarding claim 5, the Applicant has argued that Tanabe fails to disclose, suggest, or otherwise render obvious that "no photo-detector is directly mounted on the frame" recited in claim 5 because the metal mount comprises both heat sink 40 and stem 43. The Examiner respectfully disagrees. First of all, Tanabe refers to heat sink 40 and stem 43 as separate and distinctive elements. For at least this reason, the

Art Unit: 2828

applicant's argument is moot. Second, the Applicant has erroneously concluded that the stem 43 is inherently made of metal based on two cited passages (col. 25 lines 13-17 & lines 50-56, remarks p3). However, nowhere in the citations teaches or suggests that the stem 43 is made of metal because the citations only disclose the heat sink is electrically connected to the first lead 44 positioned through the stem 43, not electrically connected to the stem 43. In fact, the stem 43 cannot be made of metal because it would short-circuit and destroy the entire device. Therefore, limitations of claim 5 are clearly taught by Tanabe.

4. Regarding claim 6, the Applicant has argued that Tanabe fails to disclose a three-terminal two-beam semiconductor laser device having only three terminals because Tanabe discloses only a single beam semiconductor and it would require an additional lead to correspond to an additional laser diode. The Examiner respectfully disagrees. The Examiner notes that it would not have required an additional lead for an additional laser diode. As shown in figure 7 of Abe, there are only three leads 46a, 13c & 13b required to supply drive current to the laser diode. This implies that the combination would also only require three leads. Therefore, the limitations of claim 6 are taught by the combination.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YUANDA ZHANG whose telephone number is (571)270-1439. The examiner can normally be reached on Monday-Friday, 9:00am-5:00pm EST.

Art Unit: 2828

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minsun Harvey can be reached on 571-272-1835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Yuanda Zhang/
Examiner, Art Unit 2828
12/10/09

/Minsun Harvey/
Supervisory Patent Examiner, Art Unit 2828